

REMARKS

Status of the Claims

Claims 15, 18, 19, 39 and 40 are pending in the application. Claims 39-40 are allowed. Claims 15, 18 and 19 are rejected.

Claim 15 is amended and claim 19 is canceled herein. No new matter is added to the amended claims

Claim Amendments

Claim 15 is amended by incorporating limitation of canceled claim 19 to overcome the 35 U.S.C. §112, first paragraph (enablement) rejection. Amended claim 15 is drawn to a method of diagnosing lytic bone disease treatable by decreasing DKK-1 expression at the protein level in an individual with multiple myeloma. This method comprises measuring the expression level of the human homologue of Dickkopf-1 (DKK-1) protein in the individual, where an increased expression of the protein compared to that in a healthy individual indicates that the individual has a lytic bone disease treatable by decreasing DKK-1 expression at the protein level. This amendment is supported by the disclosure on page 5, lines 7-21; page 6, lines 1-4 and 17-21; page 16, lines 16-18; pg. 18, lines 17-19; Examples 9-10; Figures 8, 18 of the instant specification.

The 35 U.S.C. §112, First Paragraph Rejection

Claims 15 and 18-19 are rejected under 35 U.S.C. §112, first paragraph for lack of enablement. Applicants respectfully traverse this rejection.

On page 3 of the Office Action, the Examiner states that the instant claims 15 and 18-19 while being enabled for a method of diagnosing lytic bone disease in a multiple myeloma patient treatable by decreasing DKK-1 expression at the protein level, does not reasonably provide enablement for a method as claimed. The reasons for such rejection are further elaborately discussed by the Examiner on pages 3-9 of the Office Action.

Further, on page 10 of the Office Action, the Examiner discusses reasons for finding the Applicants' arguments unpersuasive. Herein, the Examiner states that although the Applicants contend that claim 15 is amended to include the limitation of "an individual having multiple myeloma", the claim does not recite this limitation. Furthermore, the Examiner states that the instant specification appears to have linked only increased DKK1 protein expression in multiple myeloma patients with lytic bone lesions. Therefore, the Examiner states that disclosure in the instant specification is not commensurate in scope with broad scope of the claimed invention which encompasses treatable at nucleic acid level.

Claim 15 is amended as discussed supra. Amended claim 15 is drawn to a method of diagnosing lytic bone disease treatable by decreasing DKK-1 expression at the protein level in an individual with multiple myeloma. The instant

specification discloses that lytic bone disease can occur prior to the formation of multiple myeloma (pg. 3, lines 11-13) and that DKK-1 is a molecular determinant for lytic bone disease and how to measure the same (pg. 5, lines 7-16). Examples 8-10 link the over-expression of DKK-1 protein to lytic bone disease that occurs in multiple myeloma patient. Further, the instant specification also demonstrates that a DKK-1 antibody blocks the repressive activity of DKK-1 in C2C12 cells (pg. 16, lines 16-18; pg. 54, lines 11-18; Fig. 41A-41B). Hence, the amended claim 15 is supported by the disclosure in the instant specification.

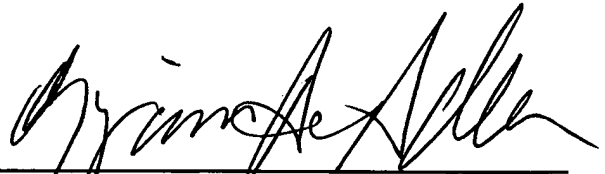
The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosure in the patent coupled with the information known in the art without undue experimentation. As discussed supra, the instant specification provides ample direction and guidance to use the claimed method. Thus, the Applicants submit that the scope of the claimed invention is commensurate with the enablement provided. Accordingly, based on the above-discussed amendments and remarks, Applicants respectfully request the withdrawal of rejection of claims 15, 18 and 18 under 35 U.S.C. §112, first paragraph.

This is intended to be a complete response to the Office Action mailed November 19, 2007. A Petition for Extension of Time (3 months) and PTO Form-2038 are also enclosed herewith. In absence of this form, please debit the petition fee or any other fees due from Deposit Account 07-1185. Applicants submit that the pending claims are in condition for allowance. If any issues

remain outstanding, please telephone the undersigned attorney of record for immediate resolution.

Respectfully submitted,

Date: 4/30/08

A handwritten signature in black ink, appearing to read "Benjamin Adler", written over a horizontal line.

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